NCBI Taxonomy Browser

PubMed Entrez BLAST OMIM Taxonomy Structure

Search for [ ] As [complete name] lock Go Clear

Display [3] lEvels using Filter: [none]

Nucleotide Protein Structure Genome Popset SNP 3D Domains Domains

GEO Datasets UniGene UniSTS PubMed Central MapView LinkOut BLAST TRACE

Lineage (full): root; cellular organisms; Bacteria; Actinobacteria; Actinobacteria (class); Actinobacteridae; Actinomycetales; Corynebacterineae; Corynebacteriaceae

---

- **Corynebacterium** *Click on organism name to get more information.*
  - **Brevibacterium flavum**
  - **Corynebacterium accolens**
  - **Corynebacterium acetoacidophilum**
  - **Corynebacterium afermentans**
  - **Corynebacterium ammoniagenes**
  - **Corynebacterium amycolatum**
  - **Corynebacterium appendicis**
  - **Corynebacterium cf. aquaticum V4.BO.26**
  - **Corynebacterium aquilae**
  - **Corynebacterium argentoratense**
  - **Corynebacterium atypicum**
  - **Corynebacterium aurimucosum**
  - **Corynebacterium auris**
  - **Corynebacterium auriscanis**
  - **Corynebacterium bovis**
  - **Corynebacterium callunae**
  - **Corynebacterium camporealensis**
  - **Corynebacterium capitovis**
  - **Corynebacterium casei**
  - **Corynebacterium caspium**
  - **Corynebacterium cervicis**
  - **Corynebacterium confusum**
  - **Corynebacterium coyleae**
  - **Corynebacterium crenatum**
  - **Corynebacterium cystitidis**
  - **Corynebacterium diphtheriae**
  - **Corynebacterium durum**
  - **Corynebacterium efficiens**
    - **Corynebacterium efficiens YS-314**
  - **Corynebacterium falsenii**
  - **Corynebacterium fastidiosum**
  - **Corynebacterium felinum**
  - **Corynebacterium flavescens**
  - **Corynebacterium freneyi**
  - **Corynebacterium genitalium**

- Corynebacterium glaucum
- Corynebacterium glucuronolyticum
  - Corynebacterium glutamicum
    - Corynebacterium glutamicum ATCC 13032
- Corynebacterium halophilum
- Corynebacterium imitans
- Corynebacterium jeikeium
- Corynebacterium kroppenstedtii
- Corynebacterium kutscheri
- Corynebacterium lipophiloflavum
- Corynebacterium macginleyi
- Corynebacterium mastitidis
- Corynebacterium matruchotii
- Corynebacterium melassecola
- Corynebacterium minutissimum
- Corynebacterium mooreparkense
- Corynebacterium mucifaciens
- Corynebacterium mycetoides
- Corynebacterium nephridii
- Corynebacterium nigricans
- Corynebacterium phocae
- Corynebacterium pilosum
- Corynebacterium propinquum
- Corynebacterium pseudodiphtheriticum
- Corynebacterium pseudogenitalium
- Corynebacterium pseudotuberculosis
- Corynebacterium renale
- Corynebacterium riegelii
- Corynebacterium segmentosum
- Corynebacterium simulans
- Corynebacterium singulare
- Corynebacterium sphenisci
- Corynebacterium spheniscorum
- Corynebacterium striatum
- Corynebacterium suicordis
- Corynebacterium sundsvallense
- Corynebacterium terpenotabidum
- Corynebacterium testudinoris
- Corynebacterium thermoaminogenes
- Corynebacterium thomssenii
- Corynebacterium tuberculostearicum
- Corynebacterium ulcerans
- Corynebacterium urealyticum
- Corynebacterium variabile
- Corynebacterium vitaeruminis
- Corynebacterium xerosis
- Corynebacterium sp.
- Corynebacterium sp. 'CDC B8037'

- Corynebacterium sp. 'Smarlab BioMol-2301292'
- Corynebacterium sp. 'Triatoma infestans'
- Corynebacterium sp. 2-4-1
- Corynebacterium sp. 2002-2300500
- Corynebacterium sp. 2002-79006
- Corynebacterium sp. 2301292
- Corynebacterium sp. 47081
- Corynebacterium sp. 61720
- Corynebacterium sp. 61722
- Corynebacterium sp. 96447
- Corynebacterium sp. 979
- Corynebacterium sp. ALY-1
- Corynebacterium sp. ATCC 43833
- Corynebacterium sp. CIP101775
- Corynebacterium sp. CIP102076
- Corynebacterium sp. CIP102124
- Corynebacterium sp. CIP102211
- Corynebacterium sp. CIP102346
- Corynebacterium sp. CIP102590
- Corynebacterium sp. CIP102622
- Corynebacterium sp. CIP102645
- Corynebacterium sp. CIP102857
- Corynebacterium sp. CIP107067
- Corynebacterium sp. CIP107291
- Corynebacterium sp. dulse 11
- Corynebacterium sp. IC10
- Corynebacterium sp. IrT-R5M2-141
- Corynebacterium sp. oral strain A43SC
- Corynebacterium sp. P-1
- Corynebacterium sp. QSSC3-5
- Corynebacterium sp. ST-10
- Corynebacterium sp. YM204B
- environmental samples
  - uncultured Corynebacterium CB1
  - uncultured Corynebacterium CB10
  - uncultured Corynebacterium CB2
  - uncultured Corynebacterium CB3
  - uncultured Corynebacterium CB4
  - uncultured Corynebacterium CB5
  - uncultured Corynebacterium CB6
  - uncultured Corynebacterium CB7
  - uncultured Corynebacterium CB8
  - uncultured Corynebacterium CB9
  - Corynebacterium sp. oral clone AK153
  - uncultured Corynebacterium sp.
  - uncultured Corynebacterium sp. MT11A
  - uncultured Corynebacterium sp. MT12R
  - uncultured Corynebacterium sp. MT13M86

- **uncultured Corynebacterium sp. MT17L**
- **uncultured Corynebacterium sp. MT1P**
- **uncultured Corynebacterium sp. MT20T**
- **uncultured Corynebacterium sp. MT25Y**
- **uncultured Corynebacterium sp. MT28T**
- **uncultured Corynebacterium sp. MT2R**
- **uncultured Corynebacterium sp. MT30Y**
- **uncultured Corynebacterium sp. MT4P**
- **uncultured Corynebacterium sp. MT7ER**
- **uncultured Corynebacterium sp. MT8R**
- **uncultured Corynebacterium sp. MT9M86**
- **uncultured Corynebacterium sp. MTcory11W**
- **uncultured Corynebacterium sp. MTcory13R**
- **uncultured Corynebacterium sp. MTcory14R**
- **uncultured Corynebacterium sp. MTcory16R**
- **uncultured Corynebacterium sp. MTcory17R**
- **uncultured Corynebacterium sp. MTcory19R**
- **uncultured Corynebacterium sp. MTcory1P**
- **uncultured Corynebacterium sp. MTcory20R**
- **uncultured Corynebacterium sp. MTcory21R**
- **uncultured Corynebacterium sp. MTcory24T**
- **uncultured Corynebacterium sp. MTcory2P**
- **uncultured Corynebacterium sp. MTcory3P**
- **uncultured Corynebacterium sp. MTcory5K**
- **uncultured Corynebacterium sp. MTcory8W**

Search for [ ] As [complete name] lock [Go] [Clear]

[Display] [3] lEvels using Filter: [none]

Corynebacterium glutamicum

Taxonomy ID: 1718
Rank: species
Genetic code: Translation table 11

Other names:

Brevibacterium divaricatum[synonym], **Corynebacterium lilium**[synonym], **Micrococcus glutamicus**[synonym], **Brevibacterium chang-fua**[synonym], **Brevibacterium glutamigenes**[synonym], **Brevibacterium saccharolyticum**[synonym], **Brevibacterium seonmiso**[synonym], **Brevibacterium taipei**[synonym], **Brevibacterium thiogenitalis**[synonym], **Micrococcus maripuniceus**[synonym], **Microbacterium sp. ATCC 15283**[synonym], **Corynebacterium glutamicum (Kinoshita et al. 1958) Abe et al. 1967**[synonym], **"Micrococcus glutamicus" Kinoshita et al. 1958**[synonym], **Brevibacterium divaricatum Su and Yamada 1960 (Approved Lists 1980)**[synonym], **Corynebacterium lilium Lee and Good 1963 (Approved Lists 1980)**[synonym], **Corynebacterium lactofermentum**[synonym], **Brevibacterium lactofermentum**[synonym], **'Corynebacterium lactofermentum'**[synonym], **'Brevibacterium lactofermentum'**[synonym], **Arthrobacter sp. NCIB 9666**[includes], **Brevibacterium sp. ATCC 19165**[includes]

Lineage(full)

cellular organisms; Bacteria; Actinobacteria; Actinobacteria (class); Actinobacteridae; Actinomycetales; Corynebacterineae; Corynebacteriaceae; Corynebacterium

Entrez records		
Database name	Subtree links	Direct links
Nucleotide	6834	6816
Protein	9833	3734
Structure	4	4
Genome	13	12
Popset	1	1
3D Domains	21	21
PubMed Central	305	305
Taxonomy	2	1

Comments and References:

'Corynebacterium lactofermentum' = Corynebacterium glutamicum
Amador et al. (1999) propose the transfer of "Brevibacterium lactofermentum" to

"Corynebacterium lactofermentum" on the basis of studies involving "B. lactofermentum" strains ATCC 13869 and DSM 20412. However, the ATCC catalogue of strains lists ATCC 13869 as C. glutamicum. Moreover, Liebl et al. (1991) have previously transferred "B. lactofermentum" strains DSM 20412 and DSM 1412 to C. glutamicum.

Abe S et al. (1967)
Abe, S., Takayama, K., and Kinoshita, S. "Taxonomical studies on glutamic acid-producing bacteria." J. Gen. Appl. Microbiol. (1967) 13:279-301. [No PubMed record available.]

 Amador E et al. (1999)
Amador, E., Castro, J.M., Correia, A., and Martin, J.F. "Structure and organization of the rrnD operon of 'Brevibacterium lactofermentum': analysis of the 16S rRNA gene." Microbiology (1999) 145:915-924.

Brevibacterium flavum & lactofermentum
"The Prokaryotes" (2nd edition) p. 1158 discusses the nomenclatural status of Brevibacterium flavum and Brevibacterium lactofermentum: "Their systematic classification has not been clarified but numerous data exist [citations listed below] indicating their close relatedness, if not identity, with Corynebacterium glutamicum: C. lilium, Brevibacterium flavum, B. lactofermentum, and B. divaricatum. Of the nomenclatural species B. flavum, B. lactofermentum, B. divaricatum, only B. divaricatum is included in the Approved Lists of Bacterial Names (Skerman et al., 1980), and none is a true member of the genus Brevibacterium. Therefore, data obtained with these species will be included with the discussion of the properties of Corynebacterium glutamicum." Abe et al. (1967) J. Gen. Appl. Microbiol. 13:279-301. Suzuki et al. (1981) Int. J. Syst. Bacteriol. 31:131-138. Minnikin et al. (1978) in "Coryneform bacteria" Academic Press, London.

Fukuda H (1971) (Brevibacterium thiogenitalis)
Fukuda H. "Method for producing L-glutamic acid." U.S. Pat. 3,623,951 dated Nov. 30, 1971.

 Liebl W et al. (1991)
Liebl, W., Ehrmann, M., Ludwig, W., Schleifer, K.H. "Transfer of Brevibacterium divaricatum DSM 20297T, "Brevibacterium flavum" DSM 20411, "Brevibacterium lactofermentum" DSM 20412 and DSM 1412, and Corynebacterium glutamicum and their distinction by rRNA gene restriction patterns." Int. J. Syst. Bacteriol. (1991) 41:255-260.

Oberreuter H et al. (unpublished_2001)
Oberreuter, H., Charzinski, J., and Scherer, S. "Infraspecific diversity of Brevibacterium linens, Corynebacterium glutamicum and Rhodococcus erythropolis as assessed by comparative partial 16S rDNA sequence analysis and Fourier-transform infrared (FT-IR) spectroscopy." Unpublished (as of 23 February 2001)

Okumura S et al. (1962) (Brevibacterium saccharolyticum)
Okumura, S. et al. "Studies on the L-glutamic acid fermentation. Part I. The new bacteria of the genus Brevibacterium isolated from the nature to produce L-glutamic acid." J. Agric. Chem. Soc. Jpn. (1962) 36:141-159. [No PubMed record available.]

Skerman VBD et al. (1980) (Corynebacterium glutamicum)
Skerman, V.B.D., McGowan, V., and Sneath, P.H.A. (editors): "Approved lists of bacterial names." Int. J. Syst. Bacteriol. (1980) 30:225-420. [No PubMed record available.]

Su Y & Yamada K (1960)
Su, Y., and Yamada, K.: Bull. Agric. Chem. Soc. Japan (1960) 24:69-74. [No PubMed record available.]

Zobell CE & Upham HC (1944) (Micrococcus maripuniceus)
Zobell, C.E., and Upham, H.C. "A list of marine bacteria including descriptions of sixty new species." Bull. Scripps Inst. Oceanogr. (1944) 5: 239-292. [No PubMed record available.]

External Information Resources (NCBI LinkOut)

LinkOut	Subject	LinkOut Provider
bnu	taxonomy/phylogenetic	Bacterial Nomenclature Up-to-date
R-plasmid pAG1	DNA/protein sequence	NCBI Plasmid Genomes
native 4.45 kb plasmid	DNA/protein sequence	
plasmid pAG3	DNA/protein sequence	
plasmid pAM330	DNA/protein sequence	
plasmid pCG2	DNA/protein sequence	
plasmid pGA2	DNA/protein sequence	
plasmid pTET3	DNA/protein sequence	
plasmid pXZ10142	DNA/protein sequence	
plasmid pXZ10145.1	DNA/protein sequence	

Note: Groups interested in participating in the LinkOut program should visit the LinkOut home page. A list of our current non-bibliographic LinkOut providers can be found here

Disclaimer: The NCBI taxonomy database is not an authoritative source for nomenclature or classification - please consult the relevant scientific literature for the most reliable information.

Comments and questions to info@ncbi.nlm.nih.gov
Credits: Mikhail Domrachev, Scott Federhen, Carol Hotton, Detlef Leipe, Vladimir Soussov, Richard Sternberg, Sean Turner.

[Help] [Search] [NLM NIH] [Disclaimer]

Search

Before submitting an order you will be asked to read and accept the terms and conditions of ATCC's Material Transfer Agreement (updated September 8, 2003).

Customers in Europe, Australia, Japan, Korea, New Zealand and Taiwan must contact a local distributor for pricing information and to place an order for ATCC cultures and products.

Bacteria

ATCC Number:	**15806** Order this item	**Price:**	**$190.00**
Organism:	*Corynebacterium* ***acetoglutamicum*** Tanaka et al.		
Designations:	KY 3513	**Isolation:**	soil
Depositors:	Kyowa Ferm. Ind. Co., Ltd.	**History:**	ATCC<<--Kyowa Ferm. Ind. Co., Ltd. <<--K. Tanaka and K. Oshima
Biosafety Level:	1	**Shipped:**	freeze-dried

Growth Conditions: ATCC medium: 44 Brain heart infusion agar (Difco 0418) or brain heart infusion (Difco 0037)
Temperature: 30.0 C

Permits/Forms: In addition to the MTA mentioned above, other ATCC and/or regulatory permits may be required for the transfer of this ATCC material. Anyone purchasing ATCC material is ultimately responsible for obtaining the permits. Please click here for information regarding the specific requirements for shipment to your location.

This material is cited in a U.S. and/or other Patent or Patent Application, and may not be used to infringe on the patent claims.

Related Products

Applications:	produces FAD [flavin-adenine dinucleotide] [2591] produces glutamic acid [glutamate] [2643]
References:	2591: Tanaka M, et al.. Process for producing flavin-adenine dinucleotide. US Patent 3,647,627 dated Mar 7 1972 2643: Tanaka K, et al.. Fermentative method for the production of L-glutamic acid. US Patent 3,335,065 dated Aug 8 1967

You may continue your word search in Bacteria by typing in your search criteria below or returning to the Bacteria menu. To search another product line, choose one from the dropdown box at the top. For complex searches using boolean operators, the following characters must be used: **&** (for AND), | (for OR), ^ (for AND NOT). An asterisk (*) is used as the wildcard. For more information please review the Search Help.

acetoglutamicum Word Search Clear Search

For query options, please read the search help.

Home Page Archive